REMARKS

Examiner's comments in the Office Action marked "non-final" and dated October 19, 2006, have been read and carefully considered by Applicant. In view of such comments, Applicant has amended the claims as set forth herein. In particular, independent claims 1, 9, and 20 and also dependent claims 2-4, 6-8, and 10-19 have all been amended to better highlight the patentable differences of Applicant's proposed invention as compared to the prior art cited by Examiner in the Office Action. In amending these claims, however, Applicant maintains that no new matter has been impermissibly introduced into the present Application.

In addition to amending claims 1-4 and 6-20, Applicant has herein added new claim 21 for Examiner's consideration. Support for the inventive subject matter set forth in claim 21 can be found in paragraphs 0033, 0036, 0038, and 0039 of the specification as was originally filed by Applicant. In view of such support, Applicant respectfully maintains that no new matter has been impermissibly introduced into the present Application by adding claim 21.

Furthermore, in addition to amending and adding the above-mentioned claims, Applicant has herein amended some of the text within paragraph 0041 of the specification. In particular, text within paragraph 0041 has been amended so that the "occupant sensors" and the "transmission gear sensor" mentioned therein have numerical designations that are consistent with the numerical designations "30" and "32" respectively assigned to the "occupant sensors" and the "transmission gear sensor" set forth in Figure 1 of the present Application. In so amending paragraph 0041, Applicant again maintains that no new matter has been impermissibly introduced into the present Application.

In sum, therefore, claims 1-4 and 6-21 remain pending in Applicant's present Application for Examiner's consideration, while claim 5 remains canceled. At the present time, it is Applicant's good faith belief that the pending claims, as presented herein, are both novel and non-obvious with respect to the prior art. Therefore, Applicant respectfully avers that the pending claims now place the present Application in a condition for allowance and notice thereof is respectfully requested.

Rejections under 35 U.S.C. § 103(a)

In the Office Action, independent claims 1, 9, and 20 and also dependent claims 2-4, 6-8, 10-12, and 14-19 stand rejected by Examiner under 35 U.S.C. § 103(a) as being obvious and therefore unpatentable over United States Patent Application Publication Number 2002/0026274, which was published for Hiroto Morizane *et al* on February 28, 2002 (hereinafter "Morizane"). In addition, dependent claim 13 stands rejected by Examiner under 35 U.S.C. § 103(a) as being obvious and therefore unpatentable over Morizane in view of United States Patent Number 5,874,904, which was issued to Takehide Hirabayashi *et al* on February 23, 1999 ("Hirabayashi"). In response, Applicant has herein amended claims 1-4 and 6-20. In view of such, Applicant now respectfully traverses the 35 U.S.C. §103(a) rejections set forth in the Office Action.

In particular, for Morizane to render the inventive subject matter now claimed in Applicant's independent claim 1 obvious and therefore unpatentable, Morizane must either teach or suggest

> [a] system for sensing an object proximate to a vehicle and selectively initiating safety operations onboard said vehicle in response thereto, said system comprising:
>
> a single vision sensor having a position with associated coordinates onboard said vehicle and operable to detect at least one object and also accordingly generate at least one object detection signal;
>
> a controller coupled to said single vision sensor and operable to generate a safety system signal in response to said associated coordinates and said at least one object detection signal and also determine said position of said single vision sensor relative to a predetermined reference onboard said vehicle that has fixed coordinates; and
>
> at least one passive countermeasure coupled to said controller and selectively operable to initiate a safety operation onboard said vehicle in response to said safety system signal[,]

as required by Applicant's independent claim 1 amended herein. Morizane, however, neither teaches nor suggests such a "system" with "at least one passive countermeasure" as now claimed and supported by Applicant. (Applicant's Application, see ¶ 0021, 0024, 0025, 0032-

0040, 0057, and Figure 1). Instead, Morizane merely teaches a cruise control system with active countermeasures such as, for example, a throttle controller, a transmission controller, and a brake controller. (Morizane, see Figure 1). Morizane neither mentions nor suggests any use of passive countermeasures with a cruise control system.

Since Morizane neither teaches nor suggests the overall "system" as particularly set forth in Applicant's independent claim 1, Applicant respectfully avers that claim 1 is not rendered obvious by Morizane. Furthermore, since claims 2-4 and 6-8 are dependent on independent claim 1, Applicant also respectfully avers that claims 2-4 and 6-8 are not rendered obvious by Morizane as well.

In addition, for Morizane to render the inventive subject matter now claimed in Applicant's independent claim 9 obvious and therefore unpatentable, Morizane must either teach or suggest

> [a] method of initiating safety system operations onboard a vehicle, said method comprising the steps of:
> (a) determining position coordinates of a single vision sensor relative to determined reference point coordinates onboard said vehicle;
> (b) detecting at least one object proximate said vehicle with said single vision sensor and accordingly generating at least one object detection signal;
> (c) determining at least one characteristic of an occupant onboard said vehicle with at least one occupant sensor and accordingly generating at least one occupant characteristic signal; and
> (d) generating a safety system signal in response to said position coordinates of said single vision sensor, said at least one object detection signal, and said at least one occupant characteristic signal[.]

as required by Applicant's independent claim 9 amended herein. Morizane, however, neither teaches nor suggests such a "method" with the step of "determining at least one occupant characteristic" as now claimed and supported by Applicant. (Applicant's Application, see ¶¶ 0035, 0041, 0056, and Figure 2). Hirabayashi neither teaches nor suggests such a method with an occupant characteristic determining step either.

Since Morizane and Hirabayashi neither teach nor suggest the overall "method" as particularly set forth in Applicant's independent claim 9, Applicant respectfully avers that claim 9 is not rendered obvious by Morizane and/or Hirabayashi. Furthermore, since claims 10-19 are dependent on independent claim 9, Applicant also respectfully avers that claims 10-19 are not rendered obvious by Morizane and/or Hirabayashi as well.

Lastly, for Morizane to render the inventive subject matter now claimed in Applicant's independent claim 20 obvious and therefore unpatentable, Morizane must either teach or suggest

> [an] adaptive cruise control system for controlling the speed of a vehicle, said adaptive cruise control system comprising:
>
> a single vision sensor having a position with associated coordinates onboard said vehicle and operable to detect at least one object and also accordingly generate at least one object detection signal;
>
> a controller coupled to said single vision sensor and operable to determine a size and a vertical up-angle of each said object in response to said associated coordinates and each said object detection signal, determine a range of each said object in response to said size and said vertical up-angle, and reduce said speed of said vehicle in response to said range; and
>
> an indicator coupled to said controller and operable to alert an operator onboard said vehicle in response to said range[,]

as required by Applicant's independent claim 20 amended herein. Morizane, however, neither teaches nor suggests such an "adaptive cruise control system" with an "indicator" as now claimed and supported by Applicant. (Applicant's Application, see ¶ 0036, 0038-0040, and Figure 1).

Since Morizane neither teaches nor suggests the overall "adaptive cruise control system" as particularly set forth in Applicant's independent claim 20, Applicant respectfully avers that claim 20 is not rendered obvious by Morizane. Furthermore, since claim 21 is dependent on independent claim 20, Applicant also respectfully avers that claim 21 is not rendered obvious by Morizane as well.

CONCLUSION

In view of the claims as amended hereinabove and also the foregoing remarks, Applicant respectfully submits that independent claims 1, 9, and 20, as well as claims 2-4, 6-8, 10-19, and 21 dependent thereon, are all non-obvious with respect to the teachings of both Morizane and Hirabayashi. Therefore, Applicant respectfully requests that Examiner's rejections be withdrawn and that a Notice of Allowance be issued for all claims 1-4 and 6-21.

Should Examiner have any questions with respect to any matter now of record, Examiner is invited to contact Applicant's undersigned attorney at (248) 223-9500.

Respectfully submitted,

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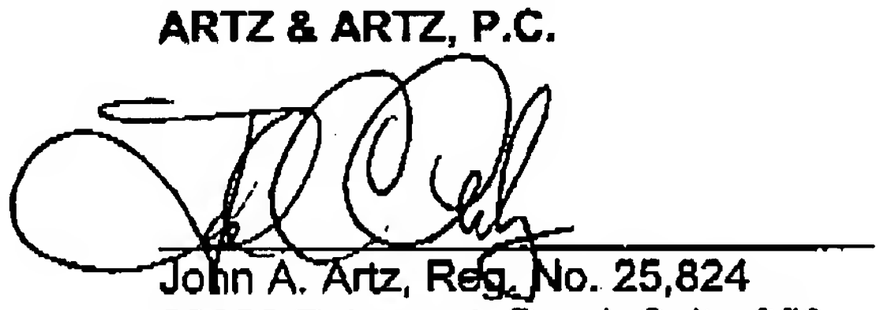

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